




Français 
1 of 1

Images

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(11) WO 2004/025759

(13) A1

(21) PCT/JP2003/011073

(22) 29 August 2003 (29.08.2003)

(25) Japanese

(26) Japanese

(30) 2002-253469

30 August 2002
(30.08.2002)

JP

(43) 25 March 2004 (25.03.2004)

(51)⁷ H01M 6/06, 4/52, 4/42

(54) NICKEL BASED COMPOUND POSITIVE ELECTRODE MATERIAL
PRIMARY CELL

(71) TOSHIBA BATTERY CO., LTD. [JP/JP]; 4-10, Minamishinagawa 3-chome,
Shinagawa-ku, Tokyo 140-0004 (JP).

(71) 東芝電池株式会社 (TOSHIBA BATTERY CO., LTD.) [JP/JP]; 〒140-0004
東京都 品川区 南品川三丁目 4 番 1 0 号 Tokyo (JP).

(72) MIYAMOTO, Shinichi [JP/JP]; 101, 14-5, Taishido 4-chome, Setagaya-ku,

(75) Tokyo 154-0004 (JP). MIYAMOTO, Kunihiro [JP/JP]; 207, 28-1, Nakakasai
1-chome, Edogawa-ku, Tokyo 134-0083 (JP). IRIE, Shuichiro [JP/JP]; 907,
21-1, Miyamoto-cho 1-chome, Minami-ku, Yokohama-shi, Kanagawa 232-0016
(JP).

(72) 宮本 慎一 (MIYAMOTO, Shinichi) [JP/JP]; 〒154-0004 東京都 世田谷区 太

(75) 子堂四丁目 1 4 番 5 号 1 0 1 Tokyo (JP). 宮本 邦彦 JPX

200 (MIYAMOTO, Kunihiro) [JP/JP]; 〒134-0083 東京都 江戸川区 中葛西一丁

目 2 8 番 1 号 2 0 7 Tokyo (JP). 入江 周一郎 (IRIE, Shuichiro) [JP/JP]; 〒
232-0016 神奈川県 横浜市 南区宮元町一丁目 2 1 番 1 号 9 0 7 Kanagawa JPX
(JP).

(74) MATSUYAMA, Masayuki; #301, Yokohama West Bldg., 27-9, Kusunoki-
cho, Nishi-ku, Yokohama-shi, Kanagawa 220-0003 (JP).

(74) 松山 允之 (MATSUYAMA, Masayuki); 〒220-0003 神奈川県 横浜市 西区
楠町 2 7-9 横浜ウエストビル 3 0 1 号 Kanagawa (JP).

(81)

AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO,
CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC,

SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW

(84) ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent
(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG)

For information on time limits for entry into the national phase please click here

Declaration under Rule 4.17

-- *of inventorship (Rule 4.17(iv)) for the following designation US*

Published

-- *with international search report*

(57) A nickel based compound positive electrode material primary cell, which uses a positive electrode active material comprising particles of a nickel oxyhydroxide based compound which have an eutectic structure formed with zinc, cobalt or both of these, have a surface coated with a higher order oxide of cobalt, and exhibit a half width of a diffraction peak having a diffraction angle near to 18 degree of 0.4 to 0.48 in its X-ray diffraction pattern. The primary cell combines improved capacity and excellent high rate characteristics. The above primary cell which further uses a negative electrode active material comprising a zinc based material containing 10 to 20 mass % of a zinc powder having a particle diameter of 75 μ m or less exhibits superior characteristics.



Français

1 of 1